Plane Talk

The Aeronautical Newsletter of the FAA Safety Program – Northwest Mountain Region

SELECT No. NM01FS99 November/December 2002

WHO ARE WE?

Welcome to the first edition of Plane Talk, the aeronautical newsletter of the FAA Safety Program – Northwest Mountain Region. Now you ask, "Who are we, and why have we shown up in your mailbox"? Well, I'm glad you asked that question. The Northwest Mountain Region serves the states of Wyoming, Washington, Utah, Oregon, Montana, Idaho, and Colorado.

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The Safety Program consists of at least one Inspector in each Flight Standards District Office (FSDO) who is dedicated to reducing the number of aircraft accidents and to seeking your compliance with the Federal Aviation Regulations. Safety Program Managers (SPM's) seek accident reduction and compliance through education, motivation, and persuasion.

Plane Talk is the combined effort of all members of the Northwest Mountain Safety Program to keep you up to date with what's happening between the aviation industry and the FAA. We intend to report on national items like FAR changes. But we intend to focus on items with a regional interest. For example, if we notice regional accident trends we'll let you know, and we'll provide suggestions as to how you can avoid similar mishaps. Also, we plan to inform you of upcoming events like the Family Fly-In, the Oregon Air Fair, and the Northwest Aviation Conference.

It is our plan to bring you Plane Talk twice a year (if you live in Western Washington, Plane Talk will replace AeroSafe twice each year). And it is our promise that Plane Talk will never sound like one lawyer's computer talking to another lawyer's computer. We want this to sound like one pilot talking to another pilot. Or one mechanic talking with another mechanic. Or one mechanic talking to a pilot. That's why we call it Plane Talk. We invite your questions, comments and suggestions. We think you'll agree that Plane Talk is not just another government publication.

We will try to give you a few references after each article so you can research the subjects we address in a little more detail.

Plane Talk will be mailed to all pilots (including student pilots) living within the seven northwestern states, who have current medical certificates. You don't have to subscribe. As long as the Airman Registry in Oklahoma City is aware of your current address and medical status, Plane Talk will show up twice a year.

ADDRESS CHANGE?

The address list is stored in Oklahoma City. They are the ones to notify of any address changes.

FAA Airman Certification Branch
Box 25082
Oklahoma City, OK 73125

More information and a printable change of address form are available online at:

http://registry.faa.gov/airmen.asp#UpdateAddress

TEMPORARY FLIGHT RESTRICTIONS

The tragic events of September 11, 2001, have changed the way we do business in aviation. The need for airspace security over specific facilities and events has necessitated the need for more use of the Temporary Flight Restriction (TFR) airspace that we have normally seen used for things like forest fires and other disaster areas. Some of these TFRs have been in place for over a year now. The controlling agent of

some TFRs is authorized the use of deadly force, if necessary, to assure security. We find that most pilots understand the need for such security measures and accept any inconveniences that they might cause. Still, we have a few pilots that are unaware of the TFR locations and the restrictions that apply within them. Here are a few pointers to help you stay well clear of these TFRs.

The first thing you need to know is how to educate yourself about their whereabouts. At press time, the only official way to find out about the location, size, height, and duration is via the NOTAM system. The TFR NOTAMS are available through Flight Service Stations and DUATS. The TFRs can change at a moments notice. Therefore, we encourage you to check NOTAMS before every flight

There are 27 continuous TFRs in 17 states. Washington has four located at Everett, Port Townsend, Bangor, and Bremerton. Oregon has one at Hermiston. Utah has one, which is located 13 miles south of Tooele. And Colorado has one located 4 nautical miles east of the Pueblo VOR. The size and altitudes are all different. Check NOTAMS!

The FAA will take appropriate certificate actions against any pilot that enters TFR airspace without authorization. It is possible that pilots operating unauthorized within TFRs will find themselves flying formation with military intercept aircraft. They do this primarily to escort the offending aircraft out of the TFR and guide it to a landing where an interview with the offending pilot will occur. If this happens to you, we strongly suggest you follow their instructions and depart the TFR as soon as possible.

After checking with a Flight Service Station, before each flight, we suggest that you pinpoint the location of each TFR on your charts. Do whatever you feel is necessary to identify each TFR so you will be able to easily navigate well clear of them during your flight. It might help to mark your charts with each TFR remembering that their size and locations might change and need to be checked before each flight.

Notice that not all TFRs are the same size or shape. Their radii, height and shapes are different. We suggest that you plan to navigate well clear of their boundaries.

The Hermiston, Oregon TFR, also known as the Umatilla TFR, is one of the most violated in the area. If you plot this TFR on your chart you will notice the close proximity to the charted Restricted Areas 5701 and 5706. Pilots mistakenly assume the Restricted Area is the TFR and fly clear of the Restricted Areas and are surprised to find they are still within the TFR.

Remember each pilot in command shall, before beginning a flight, become familiar with all available information concerning that flight. Check NOTAMS, mark you charts, and know where you are at all times.

*FAR 91.133, 91.137, 91.139, 91.141, 91.145; AIM 3-4-1, 3-5-3, 5-1-1, 5-1-3, 5-6-2
http://www.faa.gov/atpubs/AIM/

THE WORDS WE USE

by Jim Herzfeld, SPM
Casper, Wyoming

As I see it, we have a little problem in Aviation Safety with semantics, which is the "meanings" of words. This may be a detail problem or a problem of detail, but I believe all Safety Program Managers in the Northwest Mountain Region express Aviation Safety in detail.

Here is the problem in short detail. I'm a pilot so my attention span is short, so this article will be short, to the point, but in detail. My friend Scott (Gardiner) in the Seattle FSDO has a now famous program he puts on in his area called "Density Altitude". I have a program I put on in Wyoming called "Aircraft Performance". Are these programs actually about the same thing? I think so, please read on. I did my "Aircraft Performance" program recently to a Fly-In in Wyoming and discussed in detail Aircraft Performance, or the lack thereof, on a hot day in high Wyoming. The average airport elevation in Wyoming is 5,577 feet. My "Aircraft Performance" program is based on the Take Off Performance Computer sold at your favorite mail order pilot supply shop. The whole point of both these programs with different names is to get pilots to think about aircraft performance, or lack thereof, of their aircraft, at high-pressure altitude, corrected for temperature, which is Density Altitude. We just want pilots to be aware of the relationship between Aircraft Performance and high Density Altitude. Or, the lack thereof.

A pilot who did not go to my meeting departed later in the day to cross the mountains. You guessed it, the mountains climbed faster than his aircraft. Was his problem density altitude or aircraft performance? Or was it both? Or are they the same thing? As Paul Harvey would say, "here's the rest of the story".

Our pilot, realizing the error of his ways, i.e. the terrain climbing faster than his airplane, and also realizing that he can't turn because of his slow airspeed, is flying up a canyon and elected to crash land his beautiful airplane straight ahead with no

loss of life. He destroyed his airplane, but he and his passenger walked away. We're getting to the rest of the "semantics" story. Had he stalled and spun his aircraft, besides almost certainly being killed; the accident would have been classified by the FAA and the NTSB as a Stall/Spin. Was it a stall/ spin? I think not. I think it was an aircraft performance accident. My friend Scott in Seattle would have referred to the accident as a density altitude accident.

Are you getting a point here? Let's finish this up. Was this accident a Controlled Flight into Terrain (CFIT) accident? The aircraft was being controlled by the pilot and flown into terrain, but CFIT infers "a perfectly good aircraft being flown into terrain (or water) with no prior awareness of impending disaster". Our pilot hero deliberately crashed his airplane to avoid a Stall/Spin. Therefore, no CFIT. Scott and I have discussed this semantics problem with our individual NTSB partners and we all reached the same conclusion. Had the aircraft stall/spun, the accident would have been classified as a Stall/Spin, but, my pilot friends, you and I both know the accident was a Density Altitude/Aircraft Performance accident. Do we have a semantics problem in Aviation Safety? Nah, just an Aircraft Performance, or lack thereof, problem. Or is the problem Density Altitude? You decide.

PRACTICAL DENSITY ALTITUDE, PART I

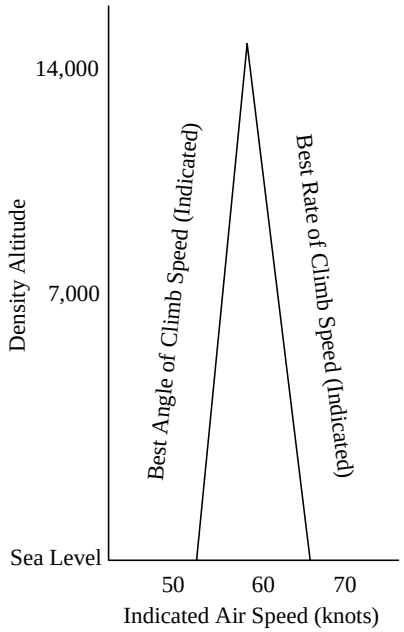
With that in mind, let us introduce you to the wisdom of Mr. Kurt Anderson. Kurt is a National Transportation Safety Board accident investigator based in Seattle, Washington. Kurt has been investigating light, general aviation aircraft accidents within the seven northwestern states (not including Alaska) for 15 years. He has taken a special interest in density altitude accident investigation because density altitude is the most common cause of fatal aviation accidents within the Northwest Mountain Region. Nationwide, the most common light, general aviation, fatal accident is continued VFR into deteriorating weather. But in the seven northwestern states our most common fatal aviation accident cause is density altitude!

Whenever he investigates a density altitude accident in which the pilot survives, Kurt questions them to determine just what mental mistake the pilot made that lead to the crash. Through this process Kurt has gained incredible insight as to how pilots think. His expertise is based upon more than 400 accident investigations. In addition, Kurt is the owner of a light, single engine, tail-dragging airplane, and he is a Flight Instructor.

Mr. Anderson has identified Ten Deadly Sins that are commonly involved in Density Altitude accidents. Ten things pilots either learned and then forgot, or didn't learn at all, or learned wrong, which are contributing to the accidents. We will cover at least one of these Deadly Sins in each issue of Plane Talk until we cover them all. This is going to take a while, but we think you'll find it valuable.

Deadly Sin Number One:

When climbing out from an airport at which Density Altitude is a concern, **DO NOT CLIMB AT THE SAME INDICATED AIRSPEED YOU WOULD USE AT A SEA LEVEL AIRPORT!** Assume you are flying a non-turbo charged, piston driven airplane. At sea level, the indicated best rate of climb speed is a higher number than the indicated best angle of climb speed. As density altitude increases, the indicated best rate of climb speed decreases, and the indicated best angle of climb speed increases. The amount of change between sea level and a density altitude of 8,000 feet is typically 5 to 8 knots of decrease in indicated best rate of climb speed, and 4 to 7 knots of increase in indicated best angle of climb speed. At some point best-indicated rate of climb speed and best-indicated angle of climb speed merge and become the same number. When this happens the airplane has reached its' Absolute Ceiling.



The misconception that is leading many of our pilots to disaster is attempting to climb out of airports, where density altitude is a concern, at the same indicated airspeed they use to climb out of sea level airports. If you are flying a non-turbo charged piston driven airplane, don't do it!!! To do so costs you performance.

Assume you are trying to climb over an obstruction at the departure end of the runway from an airport with an 8,000-foot density altitude. The indicated best angle of climb speed you should be using is likely

to be 4 to 7 knots faster than indicated best angle of climb speed at sea level. If you mistakenly attempt to climb at your sea level indicated best angle of climb speed, you are probably 4 to 7 knots too slow. You have taken an airplane whose climb performance is poor at best and made it downright lousy! There is a real good chance the airplane will not climb at all and will simply mush into the obstacle.

Next, assume you are departing from an airport with an 8,000-foot density altitude in the same non-turbo charged, piston driven airplane. The challenge this time is to climb over the ridge, which is 4 miles away. The indicated best rate of climb speed you should be using is probably 5 to 8 knots lower than your indicated best rate of climb speed at sea level. If you mistakenly attempt to climb at your sea level indicated best rate of climb speed, you are probably 5 to 8 knots too fast. Some pilots even add a few knots, "just to be on the safe side". Again, you have taken an airplane whose climb performance is poor at best and made it downright lousy! There is a real good chance the airplane will get itself out of ground effect and then refuse to climb at that indicated airspeed and simply mush into the ridge. This is a big factor in our Density Altitude accidents, and it is exactly what Jim Herzfeld was talking about earlier. Our guess is that since it is proper to use the same indicated airspeed, **while approaching to land,** regardless of the Density Altitude, quite a number of pilots have come to the mistaken conclusion that the same is true during takeoff. **NOT SO!!!**

Airplanes with turbo charged, piston driven engines must also use indicated best rate of climb speeds which are lower than sea level indicated best rate of climb speeds, but only above altitudes where the turbo charger begins to loose efficiency.

Most all of the density altitude accidents within the five northwest states involve situations requiring climbs at best rate of climb speed. Seldom do they involve climbs at best angle of climb speed. But either way, using sea level indicated climb speeds in high-density altitude situations, has the ability to transform poor climb performance into zero or even negative climb performance.

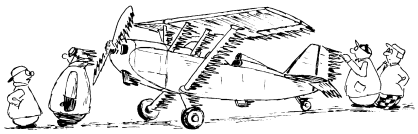
TOWER AT JACKSON HOLE, WYOMING

This is a friendly reminder to anyone planning a flight to Jackson Hole, Wyoming that for two years now the airport has been served by a control tower and yet we are still having an alarming rate of pilots landing without a clearance. As everyone knows this is against the Federal Aviation Regulations.

The tower (and it's accompanying Delta Airspace) are in operation from 7:00 AM to 9:00 PM local time. Check your current Airport/Facility Directory (A/FD) and NOTAMS for any changes to this information prior to every flight.

- Tower 118.075
- Ground 124.55
- ATIS 120.625
- AWOS-3 135.175

Also, when Vice President Dick Cheney is visiting his home in Jackson, the airport, the area around his house, and anywhere he is fishing in the valley can be (and usually is) a Temporary Flight Restriction. Actually, it is a temporary Prohibited Area. Either way, be sure to check NOTAMS before flying in the area.



ICE NOT NICE

NASA has produced several videos and multimedia materials on the subject of Icing. One video provides the very latest findings regarding the formation of ice on aircraft, including ice on the horizontal stabilizer. This video is wonderful and every IFR pilot should have a copy in his or her video library. Every pilot should take the time to go to the Icing Branch at NASA Glenn Research Center web site (URL listed below!).

They have a wealth of information available for download or online viewing. If you would like a copy, of the video on tailplane icing send a 2-hour VHS videotape to FAA - Scott Gardiner, 1601 Lind Ave. SW, Suite 260, Renton, WA 98055. Scott will copy the icing video onto yours and return it to you. We'll even pay the postage on the way back to you (well, you pay for it every April 15).

**The Icing Branch at NASA Glenn Research Center*
http://icebox.lerc.nasa.gov/

RUNWAY INCURSIONS

For the past several years, the FAA Administrator has made the reduction of Runway Incursions a major emphasis item. We are delighted to report that after several years of consistent educational efforts, Runway Incursions are on the decline.

About a year ago, the FAA divided runway incursions into four categories – Alpha, Bravo, Charlie, and Delta. The Alpha and Bravo categories are the really scary ones. In an Alpha runway incursion, once the

problem is identified there is no time to react. It is just dumb luck that an accident did not occur. In a Bravo runway incursion there is time to react, but the first reaction has to be the correct one. There is no time for a plan B. In a Charlie incursion there is time for a plan B (and even a plan C). And Delta incursions are technically incursions but safety was never in doubt. These are the ones where we might have two airplanes on one runway at the same time, but they never got any closer than 3,000 feet to each other. We are delighted to report that since the emphasis program, even category Alpha and Bravo incursions have been reduced approximately 25 per cent

From time to time, some light is shed about just how some of these runway incursions happen. We at Plane Talk will forward the information to you as we become aware of it. Here's one:

Assume airplane "B" requests taxi instructions from Ground Control, and is instructed to "Taxi to runway 36". Airplane "B" taxis to an intersection along runway 36, which is not the full-length point, but does not inform either the Ground Controller or the Tower Controller of the desire to make an intersection takeoff. At the full length point of runway 36 is airplane "C" which just happens to be the same make and model as airplane "B". Ready for takeoff and holding on the runway is airplane "A". Airplane "B" reports, "Ready for takeoff," at or near the same time airplane "A" has been cleared to takeoff. Confusing airplane "C" (full length) with airplane "B" (intersection), the Tower controller clears airplane "B" to taxi into position and hold. If airplane "B" taxis onto the runway in front of airplane "A", we have a runway incursion at best, and an awful disaster at worst.

Why did the Tower controller "assume" airplane "B" was holding short at the full-length position? Because the Aeronautical Information Manual, paragraph 4-3-10 (b) states, "An aircraft is expected to taxi to (but not onto) the end of the assigned runway unless prior approval for an intersection departure is received from Ground Control." Paragraph 4-3-10(c) goes on to add, "Pilots should state their position on the airport when calling the tower for takeoff from a runway intersection."

**Check out the FAA's Runway Safety Web site for more information:*

http://www.faarsp.org/

Safety Counselor's Corner

By John Scott, ASC
Denver

Have you ever established personal minimums for yourself? Chances are you have. Some minimums might be to limit your activities, for instance the amount of meat you eat each week. Some, on the other hand, might be to make sure you do enough of certain things like, drink five glasses of water each day. Why do we establish such minimums? Because we expect curtain results from our actions. We are told, perhaps, about the consequences that might occur because of the choices we make.

The consequences of not exercising good judgment, as a pilot, are not always clear. What happens when we fly with too little sleep, when ceilings are low or crosswinds exceed our aircraft's demonstrated capabilities? Perhaps we get lucky, perhaps not. Do we think that meeting the requirements set forth by the Federal Regulations, alone, will keep us safe?

We suggest that each pilot evaluate the safety items that concern your flights and set your own standards, which often will be higher than the FAA's minimums. Write them down and stick to them. Establish minimums that allow you to feel comfortable and confident to assume the duties of pilot in command. Set your minimums long before each flight, not in the heat of the moment during preflight activities. The following is a list of items that you might want to consider when establishing your personal minimums.

- The frequency and number of takeoffs and landings in make and model you need.
- The frequency and number of flight hours you need in make and model.
- The frequency and number of recent instrument approaches you need to make.
- The frequency and number of recent instrument flight hours.
- Familiarity with terrain, airspace, and airports.
- The amount of sleep you've had in the past 24 hours.
- Alcohol, drugs, or medications taken recently.
- Recent stressful personal events.
- Recent illness.
- Fuel reserves.
- Consider aircraft gross weight, load distribution, density altitude, and performance charts to insure excess aircraft performance.
- Your familiarity with avionics equipment.
- Appropriate nav and com equipment.
- Current charts.
- Clothing and survival gear appropriate to the route and season.
- Crosswind component you can handle.

- Runway length needed.
- Your VFR weather minimums (ceiling and visibility).
- For IFR, your personal ceiling and visibility minimums.
- Your personal takeoff minimums.
- The kinds of icing conditions your aircraft can handle.
- Build in some trip delays to allow for weather to improve, or for aircraft repairs. *When you have time to spare, go by air.*
- Personal needs such as medications in the event of an unexpected delay.

The bulleted items above are taken from the Personal Minimums Checklist, form FAA-P-8740-56.

**AIM Chapter 8*
http://www.faa.gov/atpubs/AIM/index.htm

Editors note. Aviation Safety Counselors (ASCs) are well-respected members of the aviation community who volunteer their time, skills, and expertise to help improve safety in aviation. John Scott is one of our ASC's that last year received the CFI of the year award for the State of Colorado from the Northwest Mountain Region.

If you would like to know more about this program contact your local Safety Program Manager, listed on page 1 of this newsletter.

SUSPECT UNAPPROVED PARTS? ON MY AIRCRAFT?

By Monte Taylor, SPM
Denver FSDO

The Federal Aviation Administration (FAA) has a program available to help you and your maintenance personnel detect and report Suspected Unapproved Parts (SUPs).

So what are SUPs anyway? They are parts that may be unapproved for use in your aircraft. The definition for unapproved parts is: A part, component or material that has not been manufactured in accordance with the Federal Regulations or repaired in accordance with the FARs, that may not conform to an approved type design; or may not conform to established industry or U.S. specifications (standard parts). Such unapproved parts may not be installed on a type-certificated product, unless a determination of airworthiness can otherwise be made.

Unapproved parts may even look exactly like the original except that the manufacturing process may not meet the standards or quality of the original part.

How do you detect unapproved parts? If you are not involved in maintenance it makes identification even more difficult. Sometimes the parts are identical to the original even to the last details such as the serial number or the packaging. Approved aircraft parts are in most cases expensive and this is the factor that draws the illegal operatives, MONEY.

If you have doubt about any parts that may be questionable contact the production approval holder to verify part number, serial number, and/or date of manufacture. (You can find this information through your maintenance facility.) A good tip is to ask your IA to look for suspect parts anytime your airplane is in for maintenance. Consider reading AC21-29B "Detecting and Reporting Suspected Unapproved Parts" for more details on this important subject.

**AC 21-29B Detecting And Reporting Suspected Unapproved Parts.*

WINGS

The FAA's Pilot Proficiency Awards Program (WINGS) is an excellent way to brush up on the essentials of flight. With WINGS we are encouraging pilots to establish and maintain their own annual refresher-training program. WINGS is a voluntary program, you participate only if you choose to. But if you complete WINGS, you have automatically fulfilled your Flight Review responsibilities, and you receive a pair of wings similar to military flying wings. Also, there are aviation insurance companies who will give you a break, because there is no question, those who do annual refresher training are a better risk than those who do not.

To qualify for your WINGS you must attend an FAA sponsored safety seminar and get three hours of refresher flight training from the instructor of your choice. For airplane pilots, the three hours of training include one hour of landings, one hour of instrument (either in an airplane or in a simulator), and one hour of maneuvers.

We have the same WINGS for pilots of helicopters, sail planes, ultralights, and balloons. The three hours of flight training are modified to suit the type aircraft.

**AC 61-91H Pilot Proficiency Awards Program*
http:www.faa.gov/fsdo/slc

TIPS ON WINTER FLYING

By Bryan Neville
Aviation Safety Inspector
Salt Lake City FSDO

Winter flying poses unique challenges for the general aviation Pilot. Here are a few ideas to consider for a safe flight.

PREFLIGHT PLANNING: Careful consideration must be given to several areas before "Old Man Winter" actually arrives. Installation of winter baffles, removal of wheel pants, grade of oil, condition of hoses, clamps, fittings and seals, condition of batteries, and tension of control cables are all items to review before the cold temperatures of winter cause difficulties. The route of flight itself may prove to be the most important consideration. Do you plan to fly through a valley or over mountains? Can you follow a well-traveled road or will you chance flying across wilderness territory? The difference may only be minutes, but may prove life saving if you have to make an off-airport landing.

PREFLIGHT INSPECTION: If you have or can use a heated hangar, your preflight will not be much different than in the summer months. If your airplane is out in the cold, you may have a tendency to rush your preflight. DON'T! If you park a warm airplane outside with less than full tanks, condensation of water may occur. Be sure to carefully sump each tank. Preheat is a good idea not only for the engine, but also for the cockpit. If you use a heater be watchful for the danger of fire; have a fire extinguisher handy. Don't tune your radios before they have had a chance to warn up; cold temperatures have been known to cause instruments, buttons, and knobs to stick or break.

Be sure to remove all snow, frost, and ice. If you cannot blow it off yourself, don't count on the takeoff roll to do it for you. If the aircraft surface is warm and you let it sit in falling snow, the snow may melt and refreeze and then this ice is covered with new-fallen snow. Always check.

During engine starting, there is a tendency to over-prime which results in washed-down cylinder walls. This can also result in fires under the engine cowling. This is not a pleasant way to start a skiing vacation. Read and follow the manufacturer's suggestions for cold weather starting. It's always a good idea to ask pilots who live and fly in the cold climate for ideas. After the engine starts, the use of carburetor heat may assist in proper fuel vaporization until the engine develops sufficient heat.

TAXI AND TAKEOFF: The need for braking and/or sharp turns while taxiing should be minimized. Taxi speeds should be slow enough to allow for every contingency. Skiing into a ditch is not only embarrassing but can also bend metal. Cold weather can cause "below sea level" density altitudes. You should be aware of engine power, particularly with turbo or supercharged engines. Don't over-boost. During climb-out, be aware of cylinder head temperatures. Because of winter baffling, you may need to climb at a faster airspeed.

EN ROUTE: Winter weather is very changeable. Always obtain a weather briefing and ALWAYS file a flight plan. You should keep your radios on and listen on a commonly used frequency for your area. Flight Watch on 122.0 is always a good one. Flight Following with Center is also a good idea.

Carburetor ice generally forms in temperatures between 32 and 80 degrees F if humidity is *50%* or more. If visible moisture is present, ice will form at temperatures between 15 and 32 degrees F. Winter flying also involves the use of cabin heaters; be watchful for the signs of carbon monoxide poisoning. And last but not least: DO NOT continue VFR flight into adverse weather conditions. The aviation statistics are full of pilots who thought they could. Don't become a statistic.

DESCENT: during descent be watchful for signs of carburetor ice; it is better to carry a little power during the descent. You may need to use flaps and/or gear to keep speeds reasonable. Be careful you don't descend into low visibility conditions, such as fog or low clouds.

LANDING: Landing at a busy airport is generally safer because the landing conditions can be passed from pilot-to-pilot. Again, be aware that braking may be minimal or non-existent.

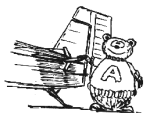
POSTFLIGHT: Some items to consider are: top off the tanks to forestall water condensation; install engine and pitot covers, wing covers, if you have them, and control locks.

SURVIVAL: ALWAYS file a flight plan and keep it updated. Don't file a round robin flight plan; it covers too much territory. Experts say that survival is 80% mental, 10% equipment, and 10% skills. Plan ahead. File a flight plan. Expect to be found. Stay dry, don't eat snow, and stay warm. Carry a blanket, a sleeping bag, a first aid kit, matches and a copy of your filed flight plan. Do all this and you'll have an excellent chance of greeting your rescuers with a smile.

WHATCHA THINK?

Now that you've seen an issue of Plane Talk, whatcha think? We encourage your comments, suggestions, letters to the editor, and questions. Please email: Scott Gardiner: scott.gardiner@faa.gov or Jim Pyles: RSPM@sprynet.com.

PLANE TALK



NORTHWEST AVIATION CONFERENCE

If you have not had the pleasure of visiting beautiful downtown Puyallup, WA, the Northwest Aviation Conference is just the excuse you have been looking for. Now in it's 20 year, the Northwest Aviation Conference draws 15,000 pilots each year. And this year we will be celebrating 100 years of powered flight. The Conference features 130 aviation trade show booths and some of the best aviation lecturers in the nation. This years' Conference speakers include Eric Lindberg, the man who recently flew a single engine homebuilt across the Atlantic to celebrate the 75th anniversary of his grandfathers epic flight. Julie Clark, airline captain and nationally ranked aerobatic pilot. Hoot Gibson, pilot and astronaut. And Phil Boyer, President of the Airplane Owners and Pilots Association. So, set aside the weekend of February 22 and 23, 2003. Further information available at www.Washington-Aviation.org, or by calling Rachel at 1-866-922-7469.